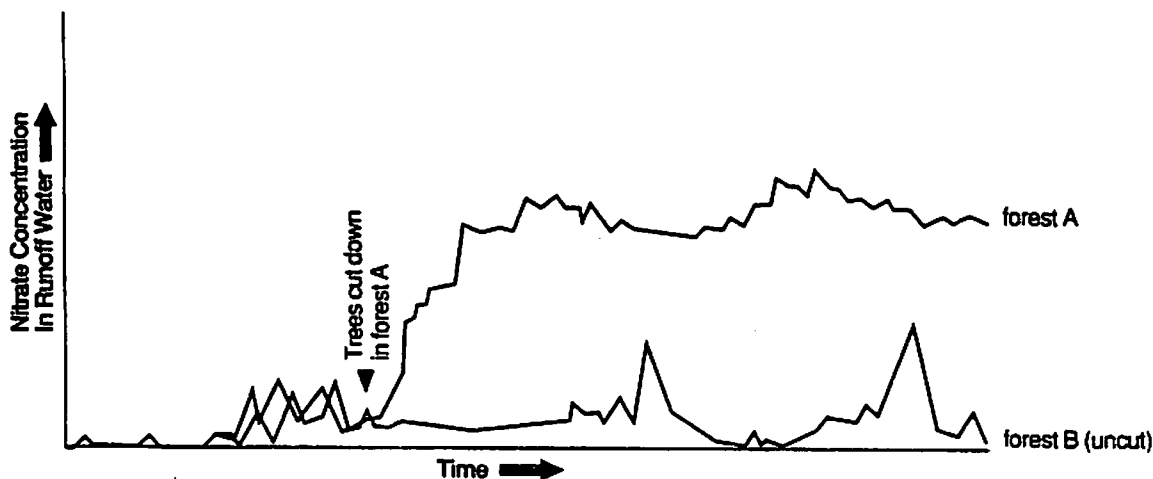


# A

Activity

## The Unkindest Cut of All

Because all of the living and nonliving things in an ecosystem are interconnected, actions that directly affect only one part of an ecosystem may have far-reaching indirect effects. The accompanying graph shows the results of an experiment involving the interactions of the living and nonliving parts of two ecosystems. Study the graph. Then answer the questions.



1. How do the two ecosystems in the experiment differ from each other?

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2. What substances are being measured in the experiment? Why are these substances important to living things?

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3. What cycles of matter are involved in this experiment? \_\_\_\_\_

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4. What is the effect of clear cutting on the amount of nitrates that remain in an ecosystem? \_\_\_\_\_

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5. Why does the amount of nitrates in the clear-cut areas change?

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6. What are some possible reasons for the difference in the amount of nitrates lost in the two ecosystems? \_\_\_\_\_

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7. People need wood for buildings, furniture, fuel, paper, and a variety of other products. Can you think of some practices that might reduce the loss of nitrates from forest ecosystems and still allow for the harvesting of trees? Propose a solution to this problem and explain why you think it might work. \_\_\_\_\_

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8. Explain how the information in the graph affects your life. What are some actions that you can take to reduce damage to forest ecosystems?

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